Campus cuisine Exchange

Contents

Team

JAYANTH RAO
Backend Developer | Integration

SOHAM ROY
Frontend Developer | Integration

ADITI AATMAJA
Product Manager | Backend Testing

DISHA ANIL
DevOps Engineer | Testing

BASHEER
Frontend Developer | Frontend Testing

SATYA
Backend Testing | Devops

The "Campus Cuisine Exchange" is a dedicated platform designed to simplify the way university students access and manage their culinary resources. By offering an extensive range of affordable and diverse recipes, along with a convenient marketplace for buying and selling surplus groceries, this app helps students streamline their meal-planning process and optimize their food spending. With user-friendly browsing tools and intuitive search filters, students can quickly find recipes that fit their budget, available ingredients, and personal preferences. The grocery marketplace further reduces waste and expenses by allowing users to purchase items at lower costs or sell their own surplus. Overall, the "Campus Cuisine Exchange" aims to promote smarter food choices, financial savings, and efficient use of resources within the university community.

Our vision

MVP

1 Provide affordable, easy-to-find recipes tailored to student budgets and time constraints.

2 Offer a grocery marketplace for buying and selling surplus ingredients to reduce food waste.

3 Increase efficiency and convenience in discovering, organizing, and preparing meals.

4 Enable informed decision-making with clear recipe details and user ratings.

5 Empower users to create, and save their own recipes, enabling customization and easy access to personalized meal ideas.

6 Address dietary restrictions and allergies by tailoring recipe suggestions and meal plans to individual needs for a safer, inclusive experience.

User Stories

USER STORY 1 →

User authentication:
Ensures secure access for university students with a valid email and strong password during sign-up. Users provide basic details like name and Email ID, while login and logout features ensure safe profile access.

Recipe Management:
Recipe management allows students to create, and delete recipes with details like name, ingredients, steps, cost, and photos.

← **USER STORY 2**

USER STORY 3 →

Grocery Marketplace:
Lets students buy and sell surplus groceries to save money and reduce waste. Users can create item listings, search for specific items, and delete listings when needed.

Recipe Browsing & Search:
Help students find meal ideas efficiently. Users can explore recipes by popularity or cost and search by keywords, ingredients, meal type, or preparation time, with key details provided.

← **USER STORY 4**

Features

RECIPE MANAGEMENT

Create, save, and search for personalized recipes with detailed instructions, cost estimates, and optional photos.

GROCERY MARKETPLACE

Buy and sell surplus groceries with detailed listings, category filters, and pricing information to reduce waste and save money.
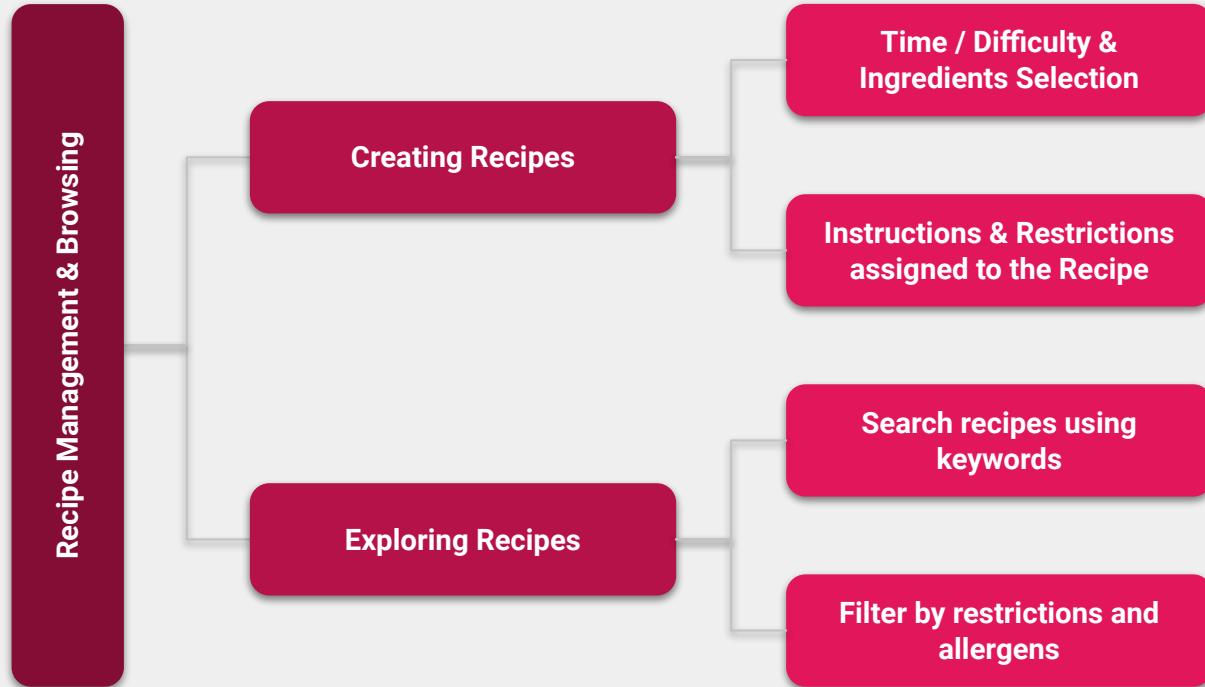
EXPLORE

Discover new recipes by browsing popular or affordable options, with search filters for ingredients, preparation time, and meal type.
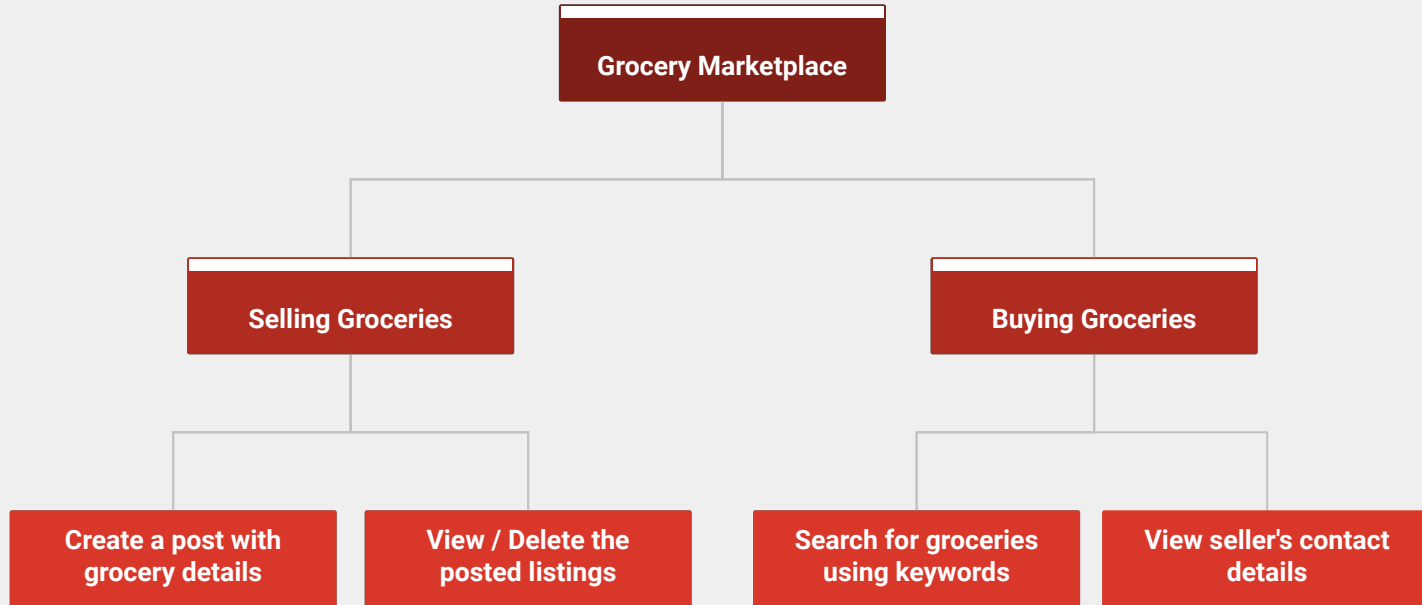
PROFILE MANAGEMENT

Manage personal details, access saved recipes, and view contributed grocery listings in one convenient dashboard.
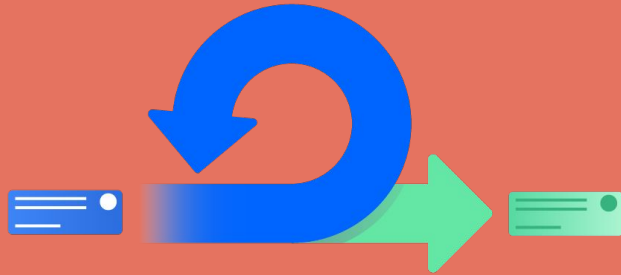
RECIPE MANAGEMENT

Recipe Management & Browsing

- **Creating Recipes**
  - Time / Difficulty & Ingredients Selection
  - Instructions & Restrictions assigned to the Recipe
- **Exploring Recipes**
  - Search recipes using keywords
  - Filter by restrictions and allergens

MARKETPLACE

```
                    ┌─────────────────────┐
                    │ Grocery Marketplace │
                    └─────────────────────┘
                              │
              ┌───────────────┴───────────────┐
     ┌──────────────────┐            ┌──────────────────┐
     │ Selling Groceries│            │ Buying Groceries │
     └──────────────────┘            └──────────────────┘
            │                                 │
      ┌─────┴─────┐                     ┌──────┴──────┐
┌───────────┐ ┌───────────┐      ┌───────────┐ ┌───────────┐
│ Create a  │ │View/Delete│      │ Search for│ │View seller│
│ post with │ │the posted │      │ groceries │ │'s contact │
│ grocery   │ │ listings  │      │using      │ │ details   │
│ details   │ │           │      │keywords   │ │           │
└───────────┘ └───────────┘      └───────────┘ └───────────┘
```

Grocery Marketplace

Selling Groceries

Buying Groceries

Create a post with grocery details

View / Delete the posted listings

Search for groceries using keywords

View seller's contact details

AGILE HIGHLIGHTS

Recent projects

Software Engineering Fall 2024 Team2

Software Engineering Fall...
Team-managed software

QUICK LINKS

My open work items   0

Done work items

1 board ⌄

	DEC				
T	W	T	F	S	S
17	18	19	20	21	22

✓ Production

✓ Production

✓ Production

Project Milestones

EXPLORING

Initial Setup
Sprint 1

API Development
(US1)

COLLABORATION
Live collaboration

SCOPING

UI- API Integration (Sprint 2)

Task Prioritization
US1 , US2

Feature Mapping

DESIGNING

Frontend Design
UI Wireframes

Integrations
Recipe View Page

Database Schema Design

DEVELOPING

Feature Integration
US3, US4

Backend Optimization
Fixing API issues

Testing pipeline Setup

TESTING

UI/UX Testing
Frontend tests passing

Backend Testing
Sprint 4

Bug Fixes and enhancements

DEPLOYMENT

Final Integration and Deployment
Sprint 5

Final Testing and Checks

Product Launch

Product Delivery Timeline
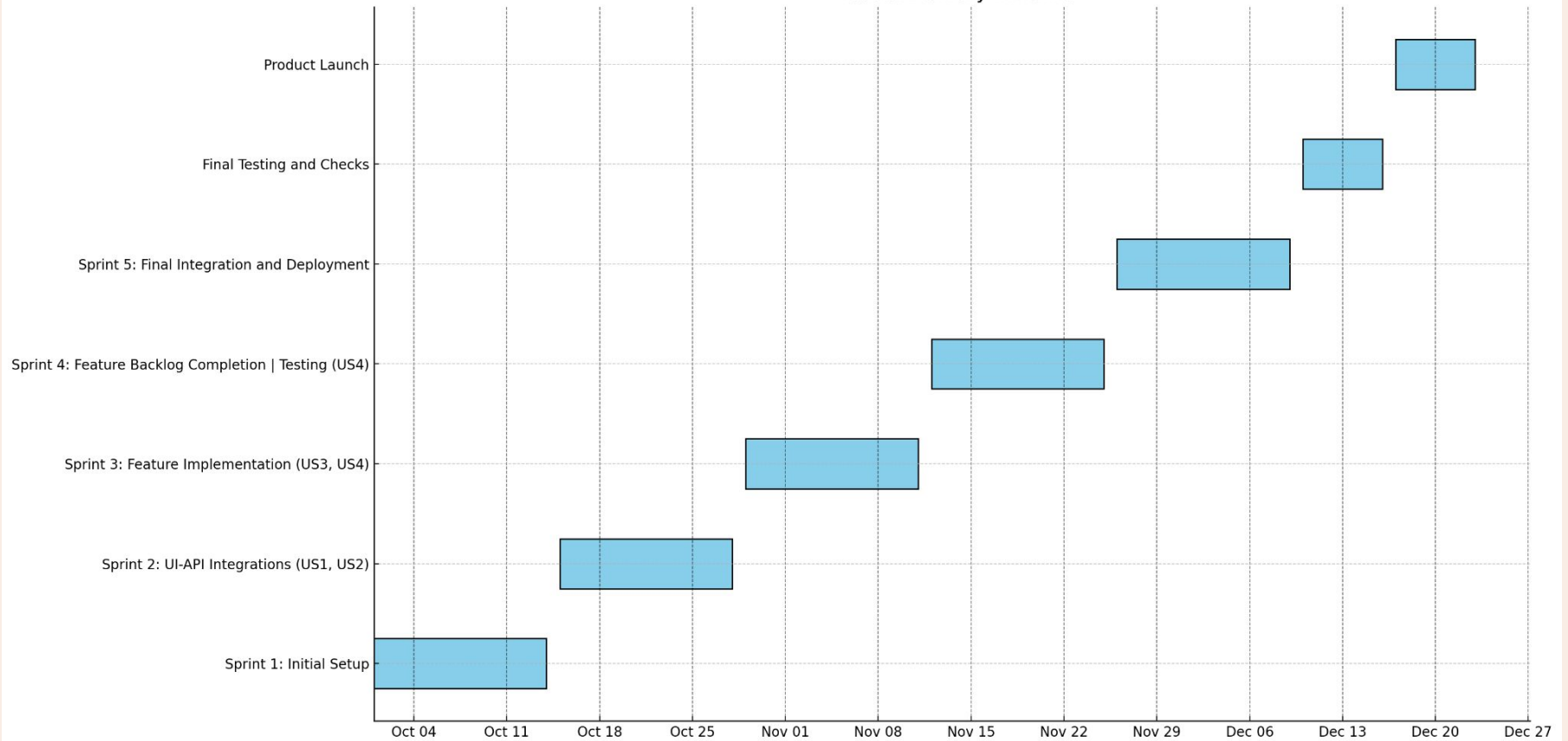
Sprint Completion Percentages
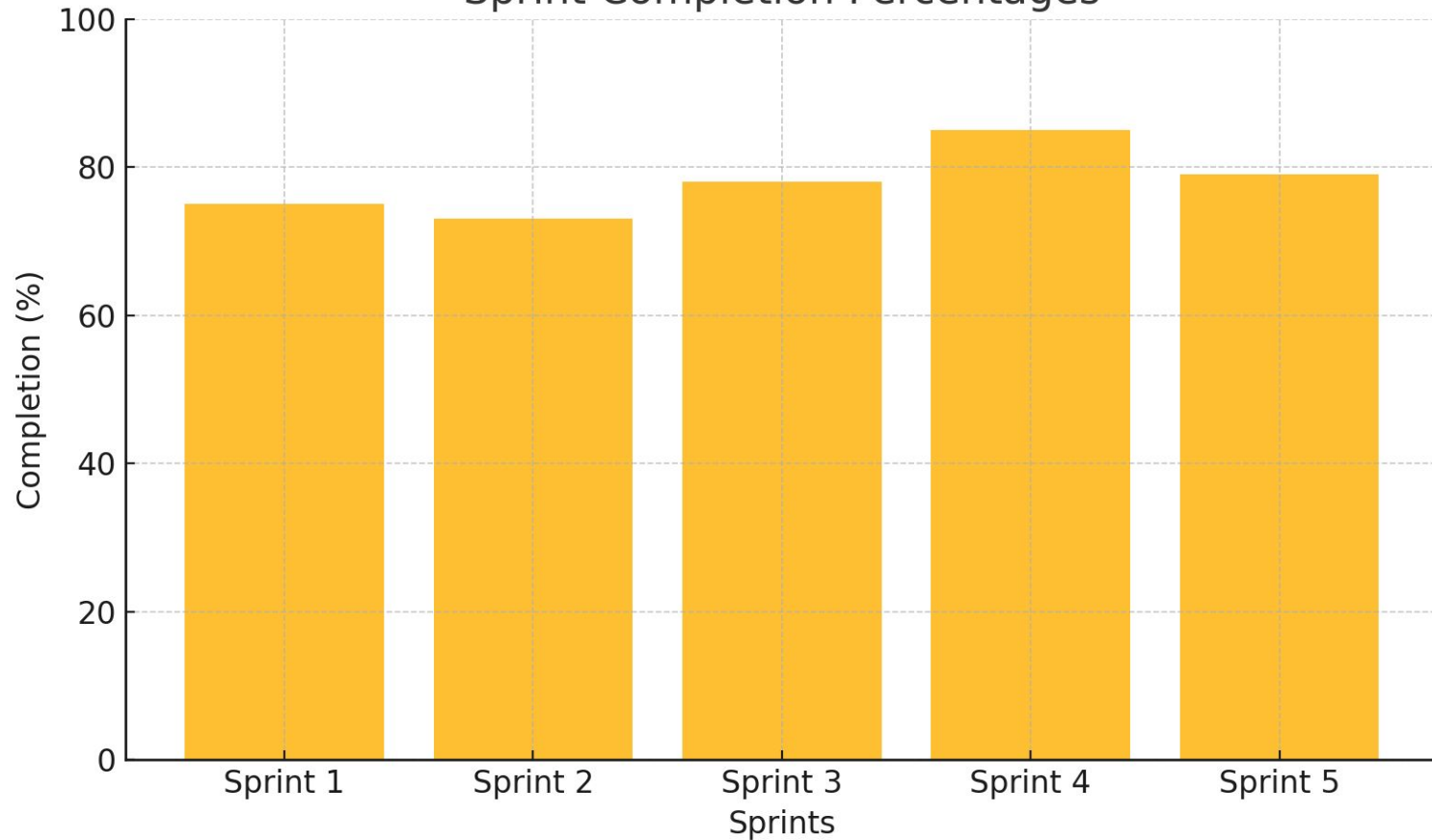
Velocity vs. Story Points Completed
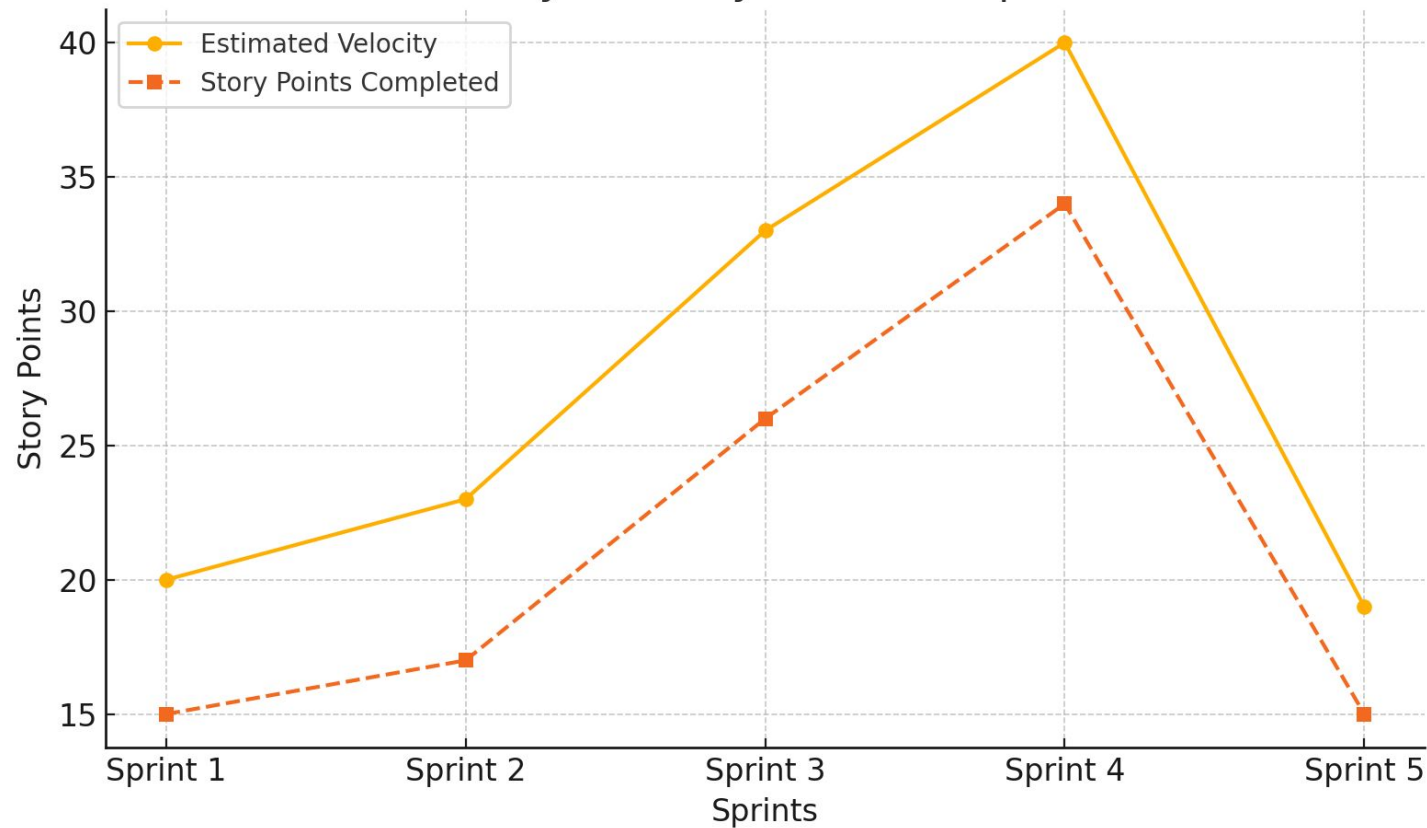
RETROSPECTIVE

Accomplishments	Improvements	Takeaways	Future Goals
Successfully developed a functional platform for recipe management, browsing, grocery marketplace, and user-friendly features.	Enhance the recipe platform by integrating social features that allow users to share, comment, and collaborate on recipes, transforming it into a vibrant community-driven app.	We achieved consistent progress across all 5 sprints, incrementally improving our skills and deliverables with each iteration. By adopting agile methodologies and industry best practices, we enhanced our ability to execute tasks efficiently, and implement CI/CD pipelines alongside robust testing strategies. Each sprint built upon the last, resulting in a steady alignment with software engineering standards and an overall growth in our technical and project management capabilities.	Collaborate with universities and campus networks to create a **student-driven ecosystem** where users can share recipes, sell surplus groceries, and build a connected community focused on affordable and sustainable living.

API Integration Issues: Incorrect API payload caused front-end data ingestion problems, leading to delays

Recipe Management Integration: Model relationship issues slowed progress, requiring further debugging for seamless integration.

Testing on Incorrect Branch: Mistakenly testing directly on the dev branch led to temporary disruptions, resolved early to avoid merge conflicts.
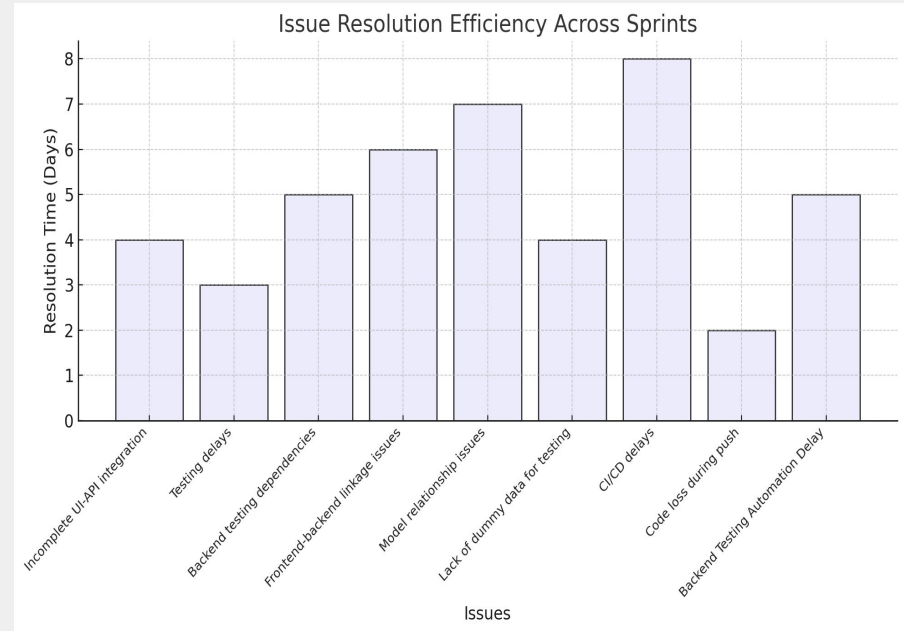
CI/CD Pipeline Delay: Slow configuration of the CI/CD pipeline affected deployment timelines and overall team pace.

Object Model Revisions: Required rework of object model definitions to improve efficiency before further API development.

Code Loss During Push: Human error caused code loss during SF - 45 push

Backend Testing Lag: Delays in backend testing due to limited tech stack familiarity and communication issues, now being addressed with redistributed tasks.

Risks and Challenges

Issue Resolution Efficiency Across Sprints

Successful Automated Testing

Total Test Cases	Required Test Coverage	Total Coverage Reached
32	80%	**83.32%**

Acknowledgement

We would like to extend our sincere gratitude to:

- **Prof. Saremi** For guiding us throughout the course, sharing invaluable insights, and fostering an environment of growth and learning.
- **Our TA** For providing continuous support, timely feedback, and helping us overcome challenges.
- **Our Peers:** For the collaborative discussions, encouragement, and shared knowledge that enriched our experience.

This class has been instrumental in helping us apply theoretical concepts to real-world problems, refine our technical and management skills, and successfully deliver this project.

Thank you for an incredible learning journey!

Thank You!